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<b>(21) International Application Number:</b> PCT/US00/12750 <b>(22) International Filing Date:</b> 10 May 2000 (10.05.00) <b>(30) Priority Data:</b> 9911690.7 19 May 1999 (19.05.99) GB 9923331.4 1 October 1999 (01.10.99) GB <b>(71) Applicant (for all designated States except US):</b> THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> LEWIS, David, Malcolm [GB/GB]; 13 St. Richards Road, Otley, West Yorkshire LS21 2AL (GB). HE, Wei, Dong [GB/GB]; 11 Tingley Common, Morley, Leeds, Yorkshire LS27 0HF (GB). YOUSAF, Taher, Iqbal [GB/GB]; 10 School Lane, Egham, Surrey TW20 9LQ (GB). GENAIN, Gilles, Yves, Marie, Fernand [GB/FR]; 7 Stamford Brook Avenue, London W6 0YB (GB). <b>(74) Agents:</b> REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).			<b>(81) Designated States:</b> AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), DM, EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
<b>(54) Title:</b> REACTIVE DYE COMPOUNDS			
<b>(57) Abstract</b> <p>A reactive dye compound comprising: (a) at least one chromophore moiety; (b) at least one SO<sub>2</sub>C<sub>2</sub>H<sub>4</sub> group which is attached to the chromophore moiety either directly via the sulphur atom of the SO<sub>2</sub>C<sub>2</sub>H<sub>4</sub> group or a linking group L; characterised in that at least one SO<sub>2</sub>C<sub>2</sub>H<sub>4</sub> group is substituted on its terminal carbon atom with at least one Y group wherein Y is -A(CO)R* wherein A is selected from O or S and wherein R* contains at least one terminal nucleophilic group, such as OH, NH<sub>2</sub>, SH, COOH, N, NHR<sup>1</sup> and NR<sup>1</sup>R<sup>2</sup> wherein R<sup>1</sup> and R<sup>2</sup> may be the same or different and may be selected from C<sub>1</sub>-C<sub>4</sub> alkyl; and salts thereof. Also claimed is a process of manufacture of the compounds herein and products obtainable by the process. The compounds herein have high Exhaustion Values (E), high Fixation Values (F) and high Efficiency Values (T) and show significant improvements in terms of reducing spent dyestuff in effluent, increasing dye affinity to the substrate, increasing the dye-substrate covalent bonding, increasing the ability to dye substrates at room temperature, decreasing the amount of dye that is removed during the post dyeing "soaping off process" and therefore simplifying the post dyeing "soaping off process" traditionally associated with dyeing cotton with fibre reactive dyes and reduction of staining of adjacent white fabrics. In addition, the compounds prepared above provide more intense dyeings and require less levels of salt for dyeing cotton substrates.</p>			